



# CDF Operations

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February 27, 2006

All Experimenters' Meeting



# Store Summary (02/20–02/23)

Store	Start Date	Duration (hours)	Initial Instantaneous Luminosity ( $10^{30} \text{ cm}^{-2}\text{s}^{-1}$ )	Delivered Integrated Luminosity ( $\text{pb}^{-1}$ )	Live Integrated Luminosity ( $\text{pb}^{-1}$ )	Good Run with Silicon ( $\text{pb}^{-1}$ )	Notes
4658 Abort	02/20 Mon	11.1	159.1	3.4	2.8 83%	2.7 82%	Vacuum crate problems
4664 Normal	02/21 Tues	13.8	57.6	1.4	1.1 77%	1.1 77%	36x20 store
4666 Abort	02/22 Wed	0.9	178.3	0.6	0.4 71%	0.4 71%	New trigger table F4 failure
Total		25.8		5.4	4.3 80%	4.2 78%	Good efficiencies for short runs



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- SVT upgrade to 512K patterns completed and tested
  - Originally 32K patterns
  - Increased pattern resolution results in lower SVT deadtime (13 kHz L1 rate @ 5% L2 deadtime with  $3 \times 10^{32}$  vs. 23 kHz before)
- Trigger
  - New configuration with XFT upgrade (4-layer tracks instead of 3-layers) was tested
  - New default trigger table announced good to higher luminosities
    - ➔ And tested successfully in last store at  $1.78 \times 10^{32}$
    - ➔ B-triggers added, many other improvements...
- CLC
  - HV problem with one single channel still annoying at the beginning of stores (on shutdown list)



# CDF Operations

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## Wednesday, February 22 Access

- ➡ Plug Calorimeter: CAEN 527 card replaced
- ➡ MiniPlug: ADMEM (frontend) card replaced in forward crate
- ➡ CPR2 (central preradiator): Faulty CAEN 527 card was replaced  
(note: beefing up CAEN card and chassis stock on shutdown list)

## (Early) Shutdown Plans:

- ➡ Plug source calibration Thursday
- ➡ Long cosmic runs (for XFT and “fingerprinting”) with occasional usual calibrations
- ➡ Unstacking steel in alcoves for survey (and Kautzky valve work)
- ➡ Opened east muon wall for lower muon chamber work



# Shutdown highlights

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## ➤ Goals

- Complete maintenance, repairs, and upgrades for running to 2009 and beyond
- Don't break anything new!

## ➤ Complete Run IIB Upgrades

- Central tracking TDCs
- XFT (fast tracking trigger) stereo
- Hardware event builder

## ➤ Maintenance and repair

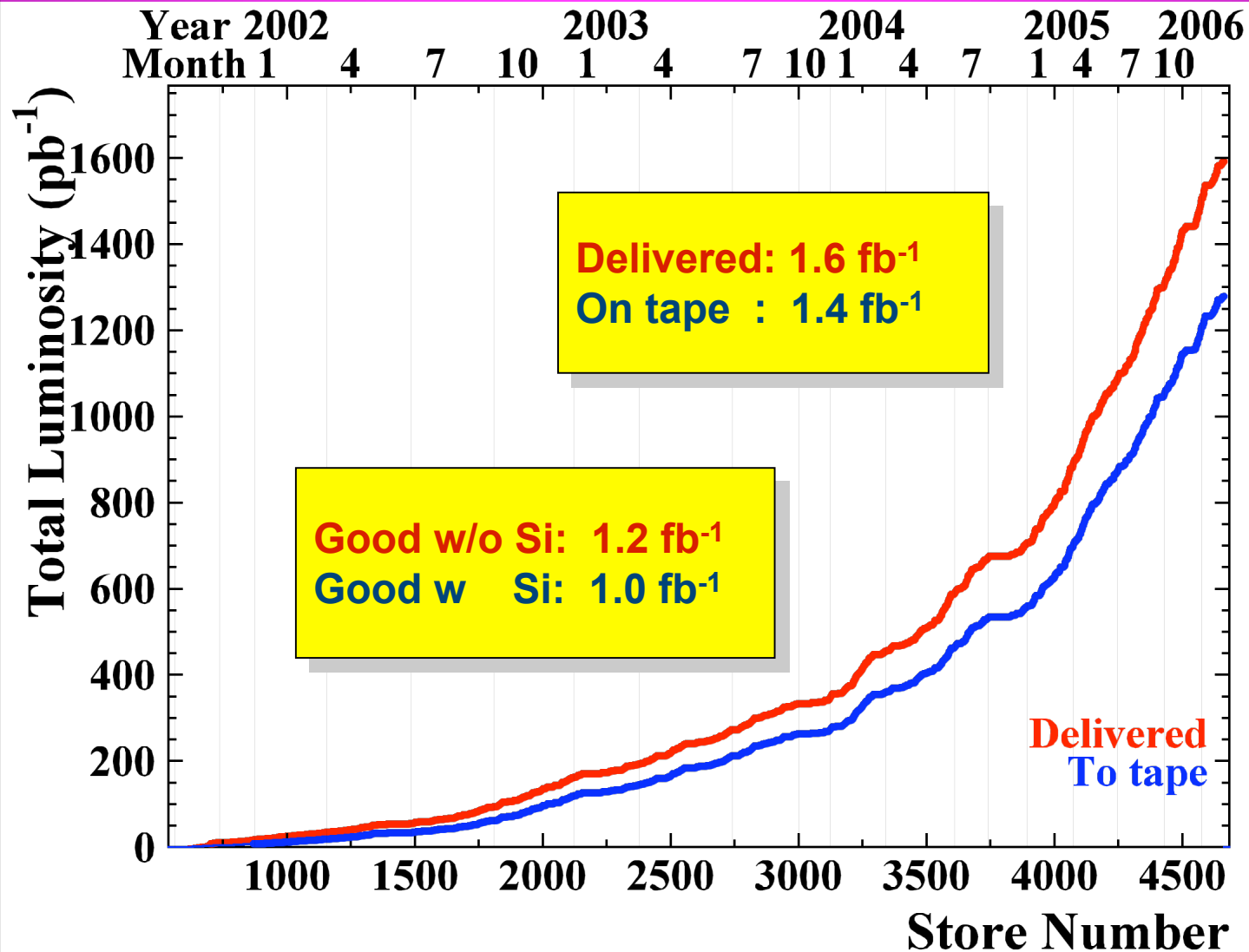
- Solenoid (e.g., gas recirculation system)
- Detectors (e.g., CAEN HV systems)
- Infrastructure (e.g., cooling systems)

## ➤ New Initiatives

- Consumer Server Logger
- Diamond beam monitors

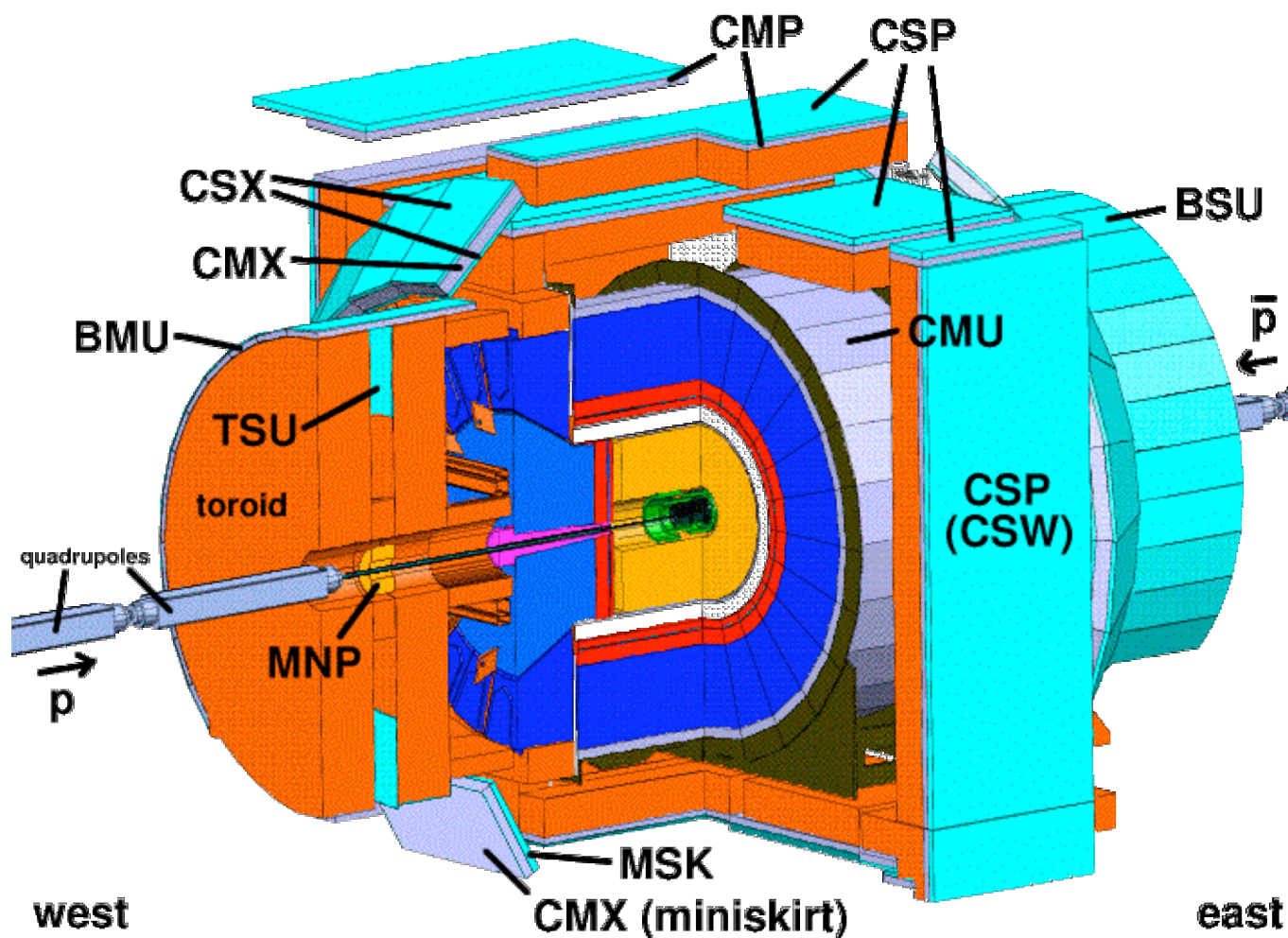


# Run II Integrated Luminosity





# CDF Run IIB Detector







## CDF Run IIB Detector (inner)

